

What is claimed is:

1. A fuse for an automobile comprising a housing manufactured by the injection molding of a polyamide resin composition, wherein the polyamide resin composition constituting the housing has a heat of fusion of 40J/g or more, as measured by means of a differential scanning calorimeter, and exhibits an average diameter of spherulites of 0.5 μ m or less, as measured by the observation by means of a polarization optical microscope.

2. A fuse for an automobile according to claim 1, wherein the rate of change in the heat of fusion, when heat-treating at 130°C for 30 minutes a polyamide resin composition molded body that forms the housing obtained by injection-molding at a mold temperature of 40°C, is less than 15%.

3. A fuse for an automobile according to claim 1 or 2, wherein the total light transmittance of a polyamide resin composition molded body that forms the housing obtained by injection-molding at a mold temperature of 70°C is 80% or more compared to the total light transmittance of a molded body obtained by injection-molding at a mold temperature of 40°C.

4. A fuse for an automobile according to any one according to claims 1 to 3, wherein a polyamide resin composition forming the housing is composed of a polyamide resin (a) and a swellable phyllosilicate (b).

5. A fuse for an automobile according to claim 4, wherein said polyamide resin (a) is at least one from the group of nylon 6, nylon 66 and copolymer or mixture of the two.

6. A fuse for an automobile according to claim 5, wherein said polyamide resin (a) is nylon 6.

7. A fuse for an automobile according to claim 4, wherein said polyamide resin (a) is composed of a mixture of crystalline polyamide (c) and low-crystalline or amorphous polyamide (d).

8. A fuse for an automobile according to any one according to claims 4 to 7, wherein the exchangeable positive ions existing between the layers of said swellable phyllosilicate (b) are swellable phyllosilicate exchanged with organic onium ions.

9. A fuse for an automobile according to any one according to claims 4 to 8, wherein said swellable phyllosilicate (b) is montmorillonite.

10. A fuse for an automobile according to any one according to claims 4 to 9, wherein said swellable phyllosilicate (b) is dispersed in the polyamide resin compositions on the monolayer level.

11. A fuse for an automobile according to any one according to claims 4 to 10, wherein said polyamide resin composition includes a crystal nucleating agent (e).

12. A fuse for an automobile according to any one according to claims 4 to 11, wherein said swellable phyllosilicate (b) is introduced in the polyamide resin composition by using a melt kneading method.